

### REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

After entry of the foregoing amendment, Claims 1-17 remain pending in the present application. Claims 1, 4, 16 and 17 have been amended support for which is found at least at Fig. 1. No new matter has been added.

By way of summary, the Official Action presents the following issues: Claims 1-2, 4-9, 13 and 16-17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Eberbach (U.S. Patent 4,885,782, hereinafter “Eberbach”) in view of Fujimori (U.S. Patent 6,026,169, hereinafter “Fujimori”); Claims 3, 12 and 14-15 stand rejected under 35 U.S.C. § 103 as unpatentable over Eberbach and Fujimori and further in view of Yamada et al. (U.S. Patent 5,757,931, hereinafter “Yamada”); Claim 10 stands rejected under 35 U.S.C. § 103 as being unpatentable over Eberbach and Fujimori and further in view of Packard (U.S. Patent 7,035,417, hereinafter “Packard”); and Claim 11 stands rejected under 35 U.S.C. § 103 as unpatentable over Eberbach and Fujimori and further in view of Hirade et al. (U.S. Patent 7,119,267, hereinafter “Hirade”).

### REJECTION UNDER 35 U.S.C. § 103

The Official Action has rejected Claims 1-2, 4-9, 13, and 16-17 under 35 U.S.C. § 103 as being unpatentable over Eberbach in view of Fujimori. The Official Action contends that the cited combination of references describes all of the Applicants’ claimed features. Applicants respectfully traverse the rejection.

Applicants’ amended Claim 1 recites, *inter alia*, an audio signal processing apparatus adapted for delivering an audio signal to a speaker system, including:

a frequency dividing filter outputting portions of a signal input thereto as separate frequency components;

at least two drive units which are divided or separated by frequency band receiving the separate frequency components output from the frequency dividing filter;

filter means for processing the input audio signal on the basis of an inverse correction characteristic corresponding to an overall impulse response of the speaker system, the input audio signal being processed to compensate for a shift between phases of respective sound waves radiated from respective drive surfaces of the at least two drive units of the speaker system, the shift being caused by the relative physical locations of the respective drive surfaces.

Eberbach describes a symmetric loudspeaker driver configuration. As noted in the Official Action at page 3, Eberbach does not describe a filter for processing the input audio signal on the basis of an inverse correction characteristic corresponding to an overall impulse response of the speaker system, the shift being caused by the relative physical locations of the respective drive surfaces. However, the Official Action cites Fujimoro as describing this more detailed aspect of the Applicants' claims.

Fujimoro describes a sound image localization device. As shown in Figure 4, this configuration is provided to cancel crosstalk of left and right channel signals of loudspeakers (13) and (14).<sup>1</sup>

Conversely, an exemplary embodiment of the Applicants' claimed advancements, an audio signal processing apparatus is provided for delivering an audio signal to a speaker system. A frequency dividing filter outputs portions of a signal input thereto as separate frequency components. At least two drive units are separated by frequency band and receive the separate frequency components output from the frequency dividing filter. A filter processes the input audio signal on the basis of an inverse correction characteristic corresponding to an overall impulse response of the speaker system. The input audio signal

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<sup>1</sup> See also column 6, lines 40-43.

is processed to compensate for a shift between phases of respective sound waves radiated from respective drive surfaces of the at least two drive units of the speaker system. The shift is caused by the relative physical location of the respective drive surfaces.

Clearly, Fujimoro describes a crosstalk canceler (1) which applies an inverse crosstalk correction to left and right channel signals. Of course, the left and right channel signals are not separated by frequency band or receive separate frequency components output from a frequency dividing filter as recited in the amended claims.

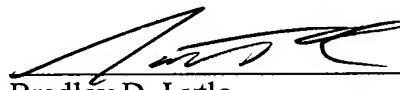
Accordingly, Applicants respectfully request that the rejection of Claims 1-2, 4-9, 13, and 16-17 under 35 U.S.C. § 103 be withdrawn.

As all other rejections of record rely upon the Eberbach and Fujimoro combination for describing the above distinguished features, and as the above distinguished features are not disclosed or suggested by these references, and are not disclosed or suggested alone or in combination with any other art of record, Applicants respectfully submit that a *prima facie* case of obviousness has not been presented. Accordingly, Applicants respectfully request that the rejection of Claims 1-17 under 35 U.S.C. § 103 be withdrawn.

Consequently, in view of the foregoing amendment and remarks, it is respectfully submitted that the present application, including Claims 1-17, is patentably distinguished over the prior art, in condition for allowance, and such action is respectfully requested at an early date.

Respectfully submitted,

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